Clinical Protocol

Id:	**Test Protocol ALL**
Status:	Unapproved
Last Modified:	April 12 2019 14:33:21:767
Diagnosis:	Sick
Treatment Site:	NOSE - nose
Description:	A test protocol that has everything

Protocol Summary

Plan Summary

Plan Id	Field Count	Default Treament Unit	Default Energy	Mode	Primary Fraction Dose [cGy]	Fraction Count
LUNL Plan	2	TR1	6	Photon	200.0	30

Plan Primary Objectives Summary

Plan Id	Primary Prescription		Prescription	Fraction Dose [cGy]	Fraction Count	Total Dose [cGy]
LUNL Plan	✔	PTV	Minimum dose is more than	200.0	30	6000.0

Protocol Structure Summary

Id	Type	Color and Style
PTV	PTV	z PTV
Aorta	Avoidance	Segment - Yellow

Plan Dose Optimization Objectives Summary

Plan Id	Structure Id	Type	Limit	Volume [%]	Total Dose [cGy]	Priority
LUNL Plan	PTV	Point	lower	90.00	6000.0	100
LUNL Plan	PTV	Point	upper	100.00	6600.0	70
LUNL Plan	PTV	gEUD	upper		0.0	100
LUNL Plan	Aorta	Point	upper	50.00	1000.0	50
LUNL Plan	Aorta	Mean			5000.0	20
LUNL Plan	Aorta	Line	upper	[100.00, 0]	[0.0, 6000.0]	50

Protocol Details

Protocol Structure Details

ID	Name	Identification	Color	CT Low	CT High	DVH Line Style	DVH Line Color	DVH Line Width
PTV	PTV	C34.9PTVICD-O-2	z PTV	-700	-500	Dot		5
Aorta	Aorta	Avoidance	Segment - Yellow	0	200	Dash	Automatic	9

Protocol Plan Details

Plan: LUNL Plan

Plan Mode:	Photon	Default Treatment Unit:	TR1
Default Energy:	6	Treatment Style:	Dynamic ARC
Fraction Count:	30	Fractions Per Day:	
Fractions Per Week:			
Immobilization Device:	Nail	Localization Technique:	Sonar
Field Alignment Rules:			

Plan Objective Details

Primary		Prescription		Fraction Dose [cGy]	Total Dose [cGy]
	PTV	At least	90 % receives more than	200.0	6000.0
✔	PTV	Minimum dose	is more than	200.0	6000.0
	Aorta	At most	50 % receives more than	135.9	4076.9

Plan Measure Details

Structure	Measure	Criterion	Target Value
PTV	Conformity Index	is more than	1.00
PTV	Gradient Measure [cm]	is less than	2.00
Aorta	V50.00 [% of volume]	is less than	5000.00
Aorta	D99.00 [cGy]	is less than	2.00

Plan Fields Summary

Id	Technique	Energy	Primary Fluence Mode	Gantry [deg]	Collimator [deg]	Couch [deg]	MLC/Block	Wedge	Field Size [cm]	Isocenter
CW PROS	ARC	6X		181.00	30.00	0.00	-	-	8.73 x 8.61	Relative
CCW PROS	ARC	6X		179.00	330.00	0.00	-	-	8.73 x 8.61	Relative

Plan Field Details

Field: CW PROS

Treatment Unit:	CL21B	Using Dynamic MLC:	
Energy:	6X	Using Compensator:	
Primary Fluence Mode:			
Technique:	ARC	DRR Template:	
Dose Rate [MU/min]:	600	SFED [cm]:	
Tolerance Table:		Field Weight:	2.0296
Skin Flash Margin [cm]:		Boluses:	
Gantry Angle [deg]:	181.00	Gantry Stop Angle	179.00

		[deg]:	
Gantry Direction:	CW	Table Angle [deg]:	0.00
Target Volume:	()		
Collimator Size [cm]:	X1:-4.17 X2:4.56 Y1:-4.43 Y2:4.18		
Collimator Angle [deg]:	30.00	Collimator Mode:	AsymmetryX&Y
Field Margin [cm]:			
Relative Isocenter, AIO [cm]:	[0.00, 0.00, 0.00]		

Field: CCW PROS

Treatment Unit:	CL21B	Using Dynamic MLC:	
Energy:	6X	Using Compensator:	
Primary Fluence Mode:			
Technique:	ARC	DRR Template:	
Dose Rate [MU/min]:	600	SFED [cm]:	
Tolerance Table:		Field Weight:	1.90237
Skin Flash Margin [cm]:		Boluses:	
Gantry Angle [deg]:	179.00	Gantry Stop Angle [deg]:	181.00
Gantry Direction:	CC	Table Angle [deg]:	0.00
Target Volume:	()		
Collimator Size [cm]:	X1:-4.56 X2:4.17 Y1:-4.43 Y2:4.18		
Collimator Angle [deg]:	330.00	Collimator Mode:	AsymmetryX&Y
Field Margin [cm]:			
Relative Isocenter, AIO [cm]:	[0.00, 0.00, 0.00]		

Plan Optimization Objective Details

IMRT

Default Smoothing X:	40	Default Smoothing Y:	30
Default Minimize Dose:	0	Default Optimization Type:	Beamlet
Max Iterations:	1000	Max Optimize Time [min]:	100.00
Default Fixed Jaws:		Interpolate:	
Use Colors:	✔		

Beam Angle Optimization

Initial Field Distribution:	Coplanar
Minimum Number of Fields:	5
Maximum Number of Fields:	9
Maximum Elevation Angle for Non-Coplanar Fields:	10
Maximum Collimator Variation:	10
Local Geometric Optimization Mode:	None

Normal Tissue Objective

Use:	true
Automatic:	true
Priority:	100
Distance From Target Border:	1
Start Dose:	105
End Dose:	60
Fall-off:	0.05

Arc Optimization

Use MU Objective:	✔
MU Objective Strength:	100
Minimum MU:	650
Maximum MU:	800
Jaw Tracking:	

Structure Objectives

Structure Objective: PTV

Volume Type:	PTVC34.9ICD-O-2	Surface Only:	
Resolution [mm]:	3.00		

Objectives

Type	Limit	Volume [%]	Total Dose [cGy]	Priority	Group
Point	lower	90.00	6000.0	100	0
Point	upper	100.00	6600.0	70	0
gEUD	upper		0.0	100	0

Structure Objective: Aorta

Volume Type:	Avoidance	Surface Only:	
Resolution [mm]:	0.00		

Objectives

Type	Limit	Volume [%]	Total Dose [cGy]	Priority	Group
Point	upper	50.00	1000.0	50	0
Line	upper	100.00	0.0	110	1
Line	upper	75.00	2000.0	110	1
Line	upper	50.00	4000.0	100	1
Line	upper	25.00	5000.0	100	1
Line	upper	0	6000.0	100	1
Mean			5000.0	20	0

Protocol Review Details

Show Min:	✔	Show Max:	✔
Show Mean:	✔	Show Modal:	
Show Median:	✔	Show Std Dev:	
Show NDR:	✔		

DVH Structures

Item	Type
PTV	Structure
=PTV sub Aorta	Expr